

# **SPRINKLER<sup>®</sup>** **MAGICIAN**



## Homeowner's Manual

### Version 6.1





## Instructions for using your new Sprinkler Magician System

Thank you for purchasing this class leading automated yard management system. It is designed to last for many years and is proudly US made. Designed for use with the whole range of Sprinkler Magician concentrates to handle pests, fertilize the garden, even apply deer repellents and fragrances. For multiple products you will need the Dual Reservoir version of this machine. The machine can also be set to act as the Watering Timer, meaning it can take the place of the regular Sprinkler Timer. This is especially useful for new construction, or any time you want the Sprinkler Magician system to replace your Sprinkler Timer.



This system applies various concentrates throughout your entire yard. It utilizes your sprinkler (irrigation) system to apply natural treatments to all lawns and gardens using our Sprinkler Magician and Mosquito Magician concentrates. They are all safe for your family, pets, and the environment.

The advanced electronics monitor and control the sprinkler system allowing it to distribute the concentrates to all areas the sprinklers reach, generally this means all lawns and gardens.

A high-pressure pump very accurately injects the concentrate into the stream of sprinkler water so that it spreads evenly on all plants and lawns. The system completely automatically cycles through one sprinkler zone at a time, until all areas have been treated.

**TREATING FOR MOSQUITOES** – only use Mosquito Magician concentrate which is laboratory tested to kill at least 98% of mosquitoes and is proven effective on many other pests such as Fleas, Ticks and Fire Ants.

**OTHER TREATMENTS** – the Sprinkler Magician machine can apply a range of natural concentrates. Contact your installer or Sprinkler Magician for more information or to order any of the products shown.



## Using the Machine

The Digital control Panel is shown below along with an explanation of the control buttons



**4 x Blue interactive menu buttons. Their current function is displayed on the screen directly above them.**

**4 x navigational menu buttons. Use these to move around in menus. Press ENTER to confirm a setting displayed on the screen directly above them.**

## Running the Machine

Note: a full description on how to install and setup the machine is given in the **Installation Manual** which is also supplied with the machine. This also contains the full set of menu options, many of which are only used when the machine is installed so are not shown in this manual. The following describes the most common points related to running the machine after it has been correctly installed, primed, and programmed.

**Checking the Schedules** - you can very easily check the settings on the machine. The home screen shown below (1) shows the time and day as well as the word **IDLE** if the machine is running in the normal mode where it does automated treatments. If you press the left (<) or right (>) arrows the screen will toggle through several screens (2) showing you what treatments are scheduled. It will show if it is for Pesticide and/or Fertilizer (Dual Reservoir models only). It will also show you which days and what time of the day these treatments will occur. If the machine has been configured to act as the Watering Timer then watering days / times will also be visible here for Schedules A, B or C, depending on which ones are turned on. **Note:** the first button press only wakes up the display.



## Scheduled Treatments (and Watering if enabled)

**Turning ON scheduled Treatments or Watering** – press the AUTO button on the Home screen. If you have more than 1 reservoir or watering is enabled it will then ask you what you want to run. If water is enabled it will allow you to choose which of the 3 schedules (A, B, C) are turned ON or OFF. The times / days for each will be those that were set in the main menus (see Settings section below).

**Cancelling (turning OFF) scheduled Treatments or Watering** - press the OFF button on the Home screen. If you have more than 1 reservoir or watering is enabled it will then ask you what you want to turn off (WATER or TREAT). You will then go to another screen where you can turn OFF (or ON) scheduled treatments. If you select WATER you will then be able to choose which of the 3 schedules (A, B, C) are turned ON or OFF.

## Manual Treatments (and Watering if enabled)

**Turning ON a Manual Treatment or Watering** – if you wish to run an extra treatment or watering cycle this can easily be done. Press any button except MAN to wake up the screen, the backlight will come on. Then press the MAN button on the Home screen. If you have more than 1 reservoir or watering is enabled it will then ask you what you want to run. Just follow the prompts. For manual watering you can also then select the run time per zone (1 – 120 minutes).

**Turning OFF a Manual Treatment or Watering** – press the OFF button on the Home screen. It will immediately turn off any running manual treatment or watering event. This will NOT turn off any scheduled treatments or watering, it only turns off manually run treatment or watering event. This is done so scheduled treatments or watering cannot be accidentally turned off.

## While Machine is Running

When running the display will show which zone is being treated and for how long it will remain on. It will also show the progress when the machine is watering (if it is configured to also act as the Watering Timer).

When doing a treatment (pesticide for example), the system will cycle through each zone by turning on the irrigation water, while injecting the concentrate into the water stream. It will run the water for 60 - 150 seconds (depending on the zone size) to push the concentrate through the lines and onto the turf and foliage. It will repeat this for all active zones and then shut off.

**Skipping a Zone** – if for some reason you wish to skip a particular zone being treated (or watered), simply press the SKIP button and the machine will move to the next zone.

## Settings

The full lists and descriptions for all settings are given in the Installation Manual. This manual shows the menus and options you will commonly use. Note: “Pest” and “Fert” are shown in these instructions but the menus will reflect whatever products were selected in the Setup menu (see # 7 & 8).

To see the menus, press the **MENU** button on the Home screen. Then you have 3 options – **WATER (if enabled)**, **TREAT & SETUP**. Each one will show you the selection of menus shown below.





## Setup Menu

You should rarely need to change anything in this menu. When the machine is installed all these values are set by the installer. However, you can change these values if you need to do things like change the type of fluid you want the machine to deliver through one of the reservoirs.

#	Menu Name	Purpose	When Menu is Shown
1	View Day & Time	To view the current day & time	On all model machines
2	Set Time	To set current time	On all model machines
3	Set Day	To set current day	On all model machines
4	Set Num Zones	To set number of Sprinkler Zones	On all model machines
5	Set Head Type	To set whether the sprinkler heads are Mist or Rotor types	When using PRESET Mode
6	Set Property Size	To set the machine for the size of the property - see PRESET chart	When using PRESET Mode
7	Set Res A Fluid	To select which product to run from reservoir A	On all model machines
8	Set Res B Fluid	To select which product to run from reservoir B	Only on Dual Reservoir machines
9	Res A Prime	To prime reservoir A pump	On all model machines
10	Res B Prime	To prime reservoir B pump	Only on Dual Reservoir machines
11	Advanced Menu	See the Advanced Menu Chart for details	On all model machines
12	Wi-Fi Setup	When used with Wi-Fi upgrade kit displays domain to use on phone	On all model machines
13	Information	Shows Software Version	On all model machines

## Treatment Menu

Usually you will only need to change the treatment days and time which is menu # 15 & 18. For Dual Reservoir models you can set the Fertilizer days and time with menus # 20 & 23.

#	Menu Name	Purpose	When Menu is Shown
14	Set Pest Zones	To set which zones are treated with pesticide	On all model machines
15	Set Pest Days	To set which days of the week pesticide treatments will	On all model machines
16	Set Pest Ounces	To set the # of ounces pesticide injected into EACH zone	When using MANUAL Mode
17	Pest Zone Time	To set time EACH zone runs when treating for pesticide	When using MANUAL Mode
18	Pest Treat Time	To set the pesticide treatment time of day	On all model machines
19	Set Fert Zones	To set which zones are treated with fertilizer	Only on Dual Res Models
20	Set Fert Days	To set which days of the week fertilizer treatments will occur	Only on Dual Res Models
21	Set Fert Ounces	To set the # of ounces fertilizer injected into EACH zone	When using MANUAL Mode
22	Fert Zone Time	To set time EACH zone runs when treating for fertilizer	When using MANUAL Mode
23	Fert Treat Time	To set the fertilizer treatment time of day	Only on Dual Res Models

**Scheduling** – you are able to run the machine as many days per week as desired by selecting the days it will run in the menu called “Set Pest Days” (& if dual reservoir “Set Fert Days”). For example, when treating for mosquitoes, running it either 2 or 3 times a week will get good results without using excessive amounts of concentrate in most areas. How often you choose to run the system depends on your local conditions, for example the number of mosquitos in your area if you are treating for them. You can change the setting any time you want—bear in mind that the system will use a given amount of concentrate every time it runs; for example changing from twice a week to once a week will decrease concentrate usage by 50%.

**Tip:** If you are using an external Sprinkler Timer and the sprinkler system runs a watering cycle at the same time when the Sprinkler Magician system is due to run a treatment, then the treatment will automatically be delayed to run 30 minutes AFTER the sprinkler system has finished watering the last zone. This is to ensure the plants are dry so the concentrate being applied adheres best to the plants and doesn't get washed off.

**Fertilizer Scheduling (only applies to dual reservoir models)** – you can fertilize as many days per week as desired, but for best results adhere to the recommendations of the fertilizer type you are using.

**Other Products** – the Sprinkler Magician system can deliver many different products like Mosquito Magician pesticide, different fertilizers, Deer Repellent, Wetting Agents and even other Animal and Reptile Repellents. Only use products supplied by Sprinkler Magician. Follow the directions on the bottle for how often to set the machine to apply these products.

## Watering Menu

#	Menu Name	Purpose	When Menu is Shown
24	Rain Sensor	Selects if you are using an external rain sensor or not	"
25	Set Sch A Zones	Selects which zones are to be watered for Sch A	If Watering is ON in the Advanced Menu
26	Set Sch A Days	Selects which days of the week Sch A watering will occur	
27	Set Sch A Run Times	Selects how long each zone will run in minutes for Sch A	
28	Set Sch A Start Time	Selects what time of day the Sch A watering cycle will start	
29	Set Sch A Budget	Selects the Sch A % to allow for seasonal changes. Default is 100%	
30	Set Sch B Zones	Selects which zones are to be watered for Sch B	"
31	Set Sch B Days	Selects which days of the week Sch B watering will occur	
32	Set Sch B Run Times	Selects how long each zone will run in minutes for Sch B	
33	Set Sch B Start Time	Selects what time of day the Sch B watering cycle will start	
34	Set Sch B Budget	Selects the Sch B % to allow for seasonal changes. Default is 100%	
35	Set Sch C Zones	Selects which zones are to be watered for Sch C	"
36	Set Sch C Days	Selects which days of the week Sch C watering will occur	
37	Set Sch C Run Times	Selects how long each zone will run in minutes for Sch C	
38	Set Sch C Run Times	Selects what time of day the Sch C watering cycle will start	
39	Set Sch C Budget	Selects the Sch C % to allow for seasonal changes. Default is 100%	

## Filling and Priming

**1. Filling the reservoir** – add at least 2 Gallons of concentrate (to both reservoirs if machine is a dual reservoir model). The first time the reservoir is filled it will take approximately ½ gallon of concentrate to prime the system and fill the reservoir up to the point that the LOW LEVEL warning goes out. This initial ½ gallon cannot be used as the system needs a reserve to ensure the pump does not ever run dry.

**2. Priming**— **Note:** this should not need to be done after the machine is installed unless the reservoir has been drained for some reason. Before priming make sure the injection pipe is not pushed into the check valve or the pump will not be able to prime.

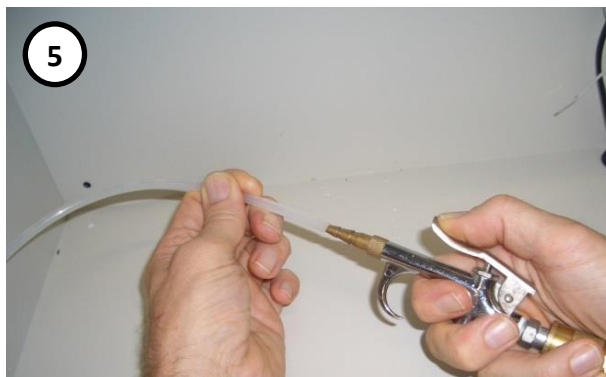
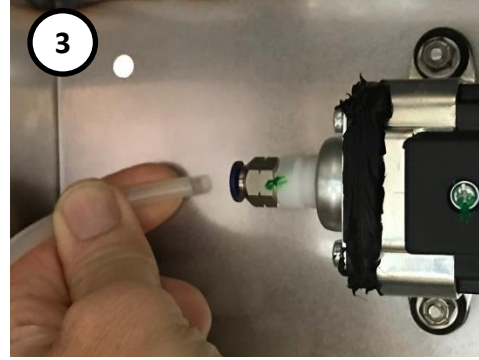
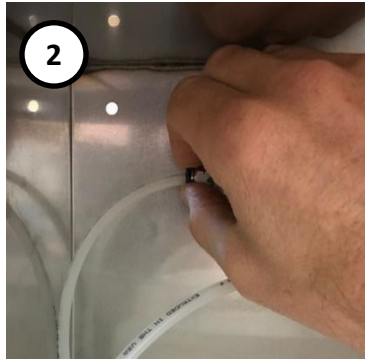
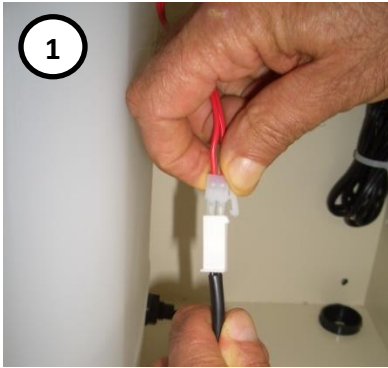
Go to the prime option in the main menu - MENU > SETUP > RES A PRIME (or RES B), and then press the PRIME button until the liquid has passed through the pump and all the way through the check valve. This will take 20 – 40 seconds and only needs to be done once. Then fit injection pipe to the check valve. **Note:** If the machine is dual reservoir model then repeat this process for the Fertilizer reservoir. If the pump will not prime easily please contact your installer or Sprinkler Magician for assistance.



## Winterizing

The Sprinkler Magician system should be winterized in any area where it is likely to get a hard frost. To winterize the system follow the steps below:

1. Remove the electrical connectors for the float switch taking care to press the small release lever and only pull on the plastic connectors (1) – never pull on the wires themselves or they may pull out of the connectors.
2. Push the blue ring (2) firmly towards the pump, at the same time remove the pump pick up tube from the pump (3).
3. Remove the reservoir from the machine (4).
4. Next turn off the Irrigation system water supply and bleed down pressure in the system by turning on one of the zones.
5. Now take the pipe that you removed from the reservoir and blow through it with compressed air with at least 30 PSI (5) to clear the lines and pump of all liquids which will now be in the irrigation piping.
6. Lastly, blow out the Irrigation system piping as you normally would to winterize the Irrigation system.
7. When you are done store the reservoir(s) in a place not subject to freezing temperatures.



## Spring Start Up

When the temperatures are consistently above freezing reverse the above winterizing steps, and then fill and prime the system as described in section 1 & 2 of the “Filling, Priming and Testing” section above.

## Troubleshooting Guide

Here is a list of common questions, if this does not resolve your issue then please call us.

- 1. The System Doesn't Work at All— firstly, check that you have a live power outlet. If it's live, then check** to see if the LCD is on. If not check the fuse inside the control unit box. If it is blown then call your installer or Sprinkler Magician for help. The fuse is a common 5 amp automotive type glass fuse. Next, check to see that the LOW PEST warning is on. If so, add more concentrate until it turns off, and then try the machine again.
- 2. I Can't Prime the System—**Make sure that the injection tube is not connected to the check valve (for priming), the system will not prime properly if the tube is connected. Also blowing compressed air through the pump can free a sticky valve which can occur if the machine has been sitting dry for any time. If for any reason you cannot get it to prime then please call your installer or Sprinkler Magician for help.
- 3. The Pump Works but the Irrigation System Does Not Operate at the Same Time—**Check the SMALL 1-amp fuse on the back of the Control Panel. If it is blown then call your installer or Sprinkler Magician for help. Also check if the sprinkler system uses a master valve or pump start relay. If so the Master Valve (MV) terminal on the Sprinkler Magician machine MUST be connected to the MV terminal at the sprinkler timer.

**4. Some zones don't work**—The Sprinkler Magician machine is capable of activating and treating up to 12 zones. The number the machine is configured for (between 1 and 12) needs to be the same as the number of zones it is electrically connected to. Check the configuration section (menus # 4 & #7) to ensure the machine has been configured to work for the same number of Irrigation zones as it is electrically connected to.

**5. (For Mosquito Magician applications) It Hasn't Got Rid of All the Mosquitoes**— there are a lot of things that affect the effectiveness of the system, here is a checklist to go through:

- A. Check for standing water** around the property and any other damp places where mosquitoes can breed. This can even be in gutters, depressions in the ground, pools, buckets, etc.
- B. Make sure you are using Mosquito Magician concentrate.** It is extremely concentrated and is the only concentrate that will work correctly with the system. (the warranty is voided if other concentrates are used).
- C. Check that the system is delivering concentrate** to all the areas (zones) that have a mosquito issue. You will be able to smell it by walking around the property after the system has just run a treatment cycle. You should smell a garlic odor. If not check D, E, F and G below.
- D. Check that the irrigation spray heads are all operative** and not jammed or partially blocked. Repair as necessary and then retest.
- E. Check that you have the system is set for the correct size of your property** (MENU > SETUP > SET PROPERTY SIZE). If the concentrate can't be smelled there either isn't enough being delivered or it may still be in the irrigation lines. Both issues are from setting the wrong property size.
- F. Check that you have the zone sizes (Rotor Head/Fixed Head) correctly configured** for each zone so that the system is delivering the right amount of concentrate to each zone (MENU > SETUP > SET HEAD TYPE).
- G. Check that the system is being run frequently enough** for the local conditions, amount of rainfall, and severity of the mosquito problem. The schedule can be changed at any time to as many days of the week as needed.
- H.** If all the above points are okay, please call your installer or Sprinkler Magician for further assistance.

## Limited Warranty

Sprinkler Magician LLC warrants to the original purchaser only, that this product is free from defects in workmanship and materials. This applies for a period of one year after the date of purchase. The warranty is voided if the customer uses concentrates other than those supplied by Sprinkler Magician.

### What the Limited Warranty Does Not Cover

This limited product warranty does not cover product misuse, improper installation, modification, alteration, impact, accident, and physical damage that are not the result from any defects in workmanship and materials. Physical damage of the product voids this limited warranty.

### What We Will Do To Correct Problems

Within 30 days of receipt of product and proof of purchase, Sprinkler Magician will inspect the product to determine the existence of any defect in workmanship and materials. If Sprinkler Magician discovers a defect in workmanship and materials then Sprinkler Magician will, at our sole option, either replace or repair the product.

### How You Can Get Service for a Warranty Claim

A Returned Merchandise Authorization (RMA) number is required for all returns. In order to submit a claim under this limited product warranty, you must obtain a Returned Merchandise Authorization (RMA) number from Sprinkler Magician; provide Sprinkler Magician with proof of purchase and the product. You are responsible for all shipping charges and the payment of such charges to return the product to Sprinkler Magician. You can email [support@sprinklermagician.com](mailto:support@sprinklermagician.com) for a RMA number and other warranty claim information.

### Disclaimers

Implied warranties including that of merchantability and fitness for a particular purpose are expressly limited to the duration of this limited warranty. Under no circumstances shall we be liable to purchaser or any other person for any special or consequential damages whether arising out of breach of warranty, breach of contract, tort, indemnity, contribution, or otherwise. We do not warrant or guarantee that the product is in compliance with your state's/province's ordinances.

There are different regulations in various areas that determine who can install systems such as this one. Please make sure you adhere to all Federal, State and local regulations in the area that you are installing in. Also, some areas may require installers to be a licensed Irrigation Professional; others may require a Pest Control License, for example. Sprinkler Magician takes no responsibility for advising anyone about what the legal requirements may be in any specific area or in general. Sprinkler Magician LLC takes no responsibility for the way its products are installed or the installer's adherence to any and all legal requirements.

### How State/Province Law Applies to the Limited Warranty and Disclaimer

Some states/provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states/provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. You may also have other rights which vary from state/province to state/province.

***Thank you for purchasing this product, if you have any questions please call your Installer or local Distributor.  
If you purchased directly from Sprinkler Magician call us on: 1-888-829-0893***



## Sprinkler Magician Commercial Machine Accessories:



### Expansion Pack to 24-Zones

The standard Sprinkler Magician machine will connect to up to 12 sprinkler zones which is enough for all but the largest properties. If you have more than 12 zones, we supply this kit to double the number to 24 zones.

It installs in less than 10 minutes and all required parts are supplied with the kit.

**Pricing Available Upon Request**



### Web Connect

Program and control our machines easily from your phone! You will be able to change all parameters including treatment days and times. You will also be alerted of low levels of concentrate in either of the reservoirs.

This is a long-range system that does not rely on Wi-Fi. The reason is that the Sprinkler Magician machine is often mounted outside, far from the Wi-Fi router. To avoid Wi-Fi connection issues we use a long-range industrial wireless protocol to link the machine to a small hub that plugs into your router.

**Pricing Available Upon Request**



### Wireless Manual Remote Control

- This remote is designed to operate an extra pesticide treatment, it does not control other functions like applying fertilizer.
- It installs in less than 10 minutes and all required parts are supplied with the kit.

Add a Wireless Remote kit and operate the machine from up to 2,000 feet away! A special high-power remote is used to allow you to operate the machine from pretty much anywhere on your property, even right from your living room. For example if you're having a BBQ you can tap the button and run an extra mosquito treatment to be sure your BBQ is not spoiled by pesky bugs!

**Pricing Available Upon Request**